

acute, curved up at the tip; alveolar plate of upper jaw narrow, with a raised inner margin, of lower jaw narrow, sharp-edged. Toes short, well webbed to the end; claws 5. 4, short, acute. Thorax ovate, very convex, shelving on the sides, with a blunt and interrupted vertebral keel. Vertebral plates in the young as broad as long, front one narrowed behind; second, third, and fourth hexagonal; fifth much smaller, square. First, second, and third costal plates large, angular above; the fourth very small, square, only as high as the small fifth vertebral. Marginal plates broad, hinder four much narrower, with a serrated edge. Nuchal plate broad, well developed. All the discal and upper part of the marginal plates in the young with a very large punctate areola. Sternum flat, strongly keeled on the sides. Anal shields small. Tail short.

The general form is very peculiar, somewhat like *Cuora*; but the sternum is perfectly solid, and there is no indication of any mobility of the two lobes. The animal differs externally in the head being one-coloured, without any band over the eye.

*Orlitia borneensis.*

*Cistudo borneensis*, Bleeker.

*Hab.* Borneo (*Bleeker*).

I mentioned this specimen under *Cuora amboinensis* in the 'Suppl. Cat. Shield Rept.' p. 21; but on reexamination I am satisfied that it has no relation to that species. It is evidently the young of a very large and solid species; for even this young specimen is well solidified, though there is an oblong groove (the remains of the opening of the yolk-bag) in the central suture of the abdominal and preanal plates.

*Descriptions of three new Species of Crustacea parasitic on the Cetacea of the N. W. Coast of America.* By W. H. DALL, U.S. Coast Survey.

Genus CYAMUS, Lam.

*Cyamus*, Lam. Syst. An. s. Vert. p. 166; Bate & Westwood, ii. p. 80.

*Larunda* and *Panope*, Leach.

*Cyamus Scammoni*, n. sp.—Male. Body moderately depressed, of an egg-ovate form; segments slightly separated; third and fourth segments furnished with a branchia at each side; this, near its base, divides into two cylindrical filaments spirally coiled from right to left; at the base of each branchia are two slender accessory filaments not coiled, quite short, and situated one before and the other behind the base of the main branchia; second pair of hands kidney-shaped, with the carpal articulation halfway between the distal and proximal ends, and having two pointed tubercles on the inferior edge, before the carpal joint; third and fourth segments somewhat punctate above, all the others smooth, the sixth and seventh slightly serrate on the upper anterior edge, and without ventral spines. Colour yellowish white. Long. .70, lat. .39 in., of largest specimen.

Female similar to the male in all respects, excepting in being a

little more slender, and in wanting the accessory appendages to the branchiæ; the ovigerous sacs are four in number, overlapping each other.

*Hab.* On the California grey whale (*Rhachianectes glaucus* of Cope) on the coast of California, very numerous. This species is named in honour of Capt. C. M. Scammon, U.S. Rev. Marine, well known by his studies on the cetaceans. The specimens here described were collected and submitted by him for description, and will be figured in his forthcoming monograph of the West Coast whales. I may remark here that these species are all so distinct from those figured by Milne-Edwards, Gosse, Bate, and Westwood, that a comparative description has seemed unnecessary—also that the species obtained on different species of cetaceans have so far been found invariably distinct. The inference is, of course, that each cetacean has its peculiar parasites, a supposition which agrees with our knowledge of the facts in many groups of terrestrial animals.

*Cyamus suffusus*, n. sp.—Body flattened, elongate; segments subequal, outer edges widely separated; branchiæ single, cylindrical, slender, with a very short papilliform appendage before and behind each branchia; superior antennæ unusually long and stout; first pair of hands quadrant-shaped; second pair slightly punctate, arcuate, emarginate on the inferior edge, with a pointed tubercle on each side of the emargination; third joint of the posterior legs keeled above, with a prong below; pleon extremely minute; segments all smooth; no ventral lines on the posterior segments. Colour yellowish white, suffused with rose-purple, strongest on the antennæ and branchiæ. Length .41, breadth (of body) .25 in. All the specimens which have passed under my observation, some eight or ten in number, were males.

*Hab.* On the “humpback” whale (*Megaptera versabilis*, Cope), Monterey, California.

*Cyamus mysticeti*, n. sp.—Body flattened, subovate, segments adjacent; branchiæ single, short, stout, pedunculated, a single papilliform appendage behind each; head short and wide; first pair of legs very small; hands all simple and smooth, fingers greatly recurved; carpal articulation in the second pair of hands halfway between the proximal and distal ends of the hand; pleon very minute. Colour dark brownish yellow. Length .33 in., breadth (of body) .16 in. Two female specimens.

*Hab.* On the northern “bowhead” whale (probably *Balæna mysticetus*, Linn.), near Behring Strait.

This is the most compact of the three species, as well as the smallest. I find, in comparing large series of *C. Scammoni*, that a considerable variation in form obtains, so far as regards comparative length and breadth, even in adult specimens, and these differences are greater than those observed, in the same characters, between the sexes.—*Proc. Calif. Acad. Sci.*, Nov. 1872.